



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,873	04/12/2001	Almut Kriebel	P20635.P06	1382

7055 7590 10/21/2002

GREENBLUM & BERNSTEIN, P.L.C.  
1941 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1731

10

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/832,873

Applicant(s)

KRIEBEL ET AL.

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1731

The restriction requirement was made Final in Paper No.

Applicant states the term "consistent" is not intended to be "consistency". Accordingly the 35 USC 112 rejection is dropped with respect to consistent.

Applicant has not responded to what types of structure is included by the term "mallet". The original disclosure called this a "beetle mallet roll". What is this? Applicant has not answered the Offices inquiry as to what types of apparatus are included in the term. For example, does it include conventional hammer mills? To be fully responsive Applicant should explain as to what types of apparatus are included in this non-conventional term.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289.

WO 96/18769 (Figure 3) teaches delivering an aqueous fibrous stock (19), pressing out water in dewaterer (18) to form a highly consistent high consistency stock, introducing the stock in predisperser (1) to loosen and distribute the stock, transporting the stock from the predisperser (1, 2) to a second disperser (8, 9) by screw feeder (7). FR 1,239,047 teaches the alternativeness of using a mallet roll (Figure 1) and a disk disperser (Figures 2 and 3) for dispersing paper stock. Or FR 2, 364,289 teaches dispersing paper stock with a mallet roller. It would have been obvious to the routineer to substitute the mallet roller disperser of FR 1,239,047 for the disk disperser of WO 96/18769 as they perform the same function of pre-dispersing and shredding the

Art Unit: 1731

paper stock. It would have been obvious to the routineer to substitute the mallet roller disperser of FR 1,239,047 for one or both of the disk dispersers of WO 96/18769 as FR 1,239,047 teaches the alternativeness of using disc or mallet dispersers. The claims read on two mallet roll dispersers in sequence wherein the first would break up the fibrous material before feeding the material to the second mallet disperser. Or FR 2,364,289 teaches that a mallet roller (14) could be placed prior to a disperser to break up the stock material. It would have been obvious to the routineer to use the "mallet roller" of FR 1,239,047, having fixed peripheral impact sections, to break up the stock material of WO 96/18769 prior to the disperser as taught by FR 2,364,289. See WO 96/18769, page 2, lines 25-26 for adding steam centrally into the second disperser, Figure 3, (17). Claim 7 is rejected, as the axis through which the mallets, of FR 1,239,047, rotate would be perpendicular to the transport direction. Claim 13 is rejected as WO 96/18769 introduces the material centrally into the dispersing machine using a screw conveyer; see Fig. 1, (9). It would have been especially obvious to add the steam directly to the dispersing zone of WO 96/18769, as such is taught by FR 1,239,047, see Figures 1 and 3.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289 as applied to claim 1 above, and further in view of German 197 12 653.

WO 96/18769 does not give any specifics as to the disc disperser (7,8). As evidenced by German 197 12 653, such dispersers conventionally have several lines of teeth on the surface of the discs to help disperse the paper stock. It would have been obvious to the artisan that the teeth of German 197 12 653 could be used on the disks of WO 96/18769 to better disperse the paper stock. It would have been especially obvious to substitute the disperser of German 197 12 653

Art Unit: 1731

for the disperser of WO 96/18769 as they both are used to heat (with steam supplied to the middle of the disperser) and disperse paper stock.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 with or without FR 2, 364,289 as applied to claim 1 above, and further in view of DAVENPORT with or without German 197 12 653.

DAVENPORT teaches, col. 14, line 5 to column 15, line 14, using a mallet roller (Figure 8 (62)) to predisperse and shred paper stock to pieces less than 6 inches (152 mm) prior to a disk disperser and teaches that the mallet roller reduces the energy needed to disperse the paper stock. It would have been obvious to use the speed necessary to obtain the desired degree of dispersing and paper size. If necessary, German 197 12 653 teaches using a paper length of 5 to 30 mm, see claims 5 and 6, a rotation speed of 10-30 sec. for the disc disperser, see claim 13. It would have been obvious to use a slower speed of rotation for the predisperser of DAVENPORT and/or WO 96/18769 as DAVENPORT teaches that the mallet roller saves energy over other predispersing machines.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "mallet roll" and "mallets" are indefinite. This is not a conventional term used in the art. It is not clear what this term includes. For example, does it include conventional hammer mills? Claim 7, the term "an axis of the mallet roll" is indefinite. Is this the axis of travel or axis of rotation? Claims 14-16, the term "dispersing fittings" do not have a proper antecedent basis.

Art Unit: 1731

KRIEBEL et al (U.S. 6,250,573) cited of interest as it is the foreign counterpart of GERMAN 197 12 653.

The argument that WO 96/18769 uses a grinder is not convincing as WO 96/18769 clearly discloses using two dispersers (1) and (8). See page 3, lines 26-30, page 5, lines 1-6 and page 4, line 28.

The argument that it would not be obvious to substitute the mallet rolls of FR '047 or '289 for the "grinder" of WO 96/18769 is not convincing as (1) WO 96/18769 discloses using a disperser and not only a grinder and (2) FR '289 teaches using a mallet roll (14) prior to a disperser (2) to break up the stock material. From the teachings of FR '289 it would have been obvious to use a mallet roll prior to one or both of dispersers of WO 96/18769 to break up the stock material prior to dispersing the material. Figures 1 and 2 of FR '047 teach using the same type of mallet roll as that claimed, e.g. having fixed peripheral impact sections. It would have been obvious to use the mallet roll of FR '047 for the mallet roll of FR '289 and use it prior to the disperser of WO 96/18769.

Applicant's amendment, drawn to "loosening and distributing"..."thereby breaking up"..."fixed peripheral impact sections", necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

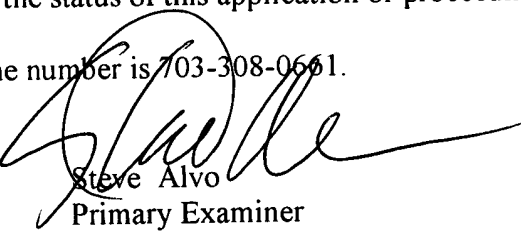
Art Unit: 1731

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 703-308-2048. The examiner can normally be reached on 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Steve Alvo  
Primary Examiner  
Art Unit 1731

msa  
October 20, 2002